



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/848,988	05/19/2004	Lawrence Tibor Greenstein	LOGRE-26,460	5975
25883	7590	12/09/2005	EXAMINER	
HOWISON & ARNOTT, L.L.P			NGUYEN, HUNG T	
P.O. BOX 741715			ART UNIT	
DALLAS, TX 75374-1715			PAPER NUMBER	
			2636	

DATE MAILED: 12/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/848,988

Applicant(s)

GREENSTEIN ET AL.

Examiner

HUNG T. NGUYEN

Art Unit

2636

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 August 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-18, 21, 23-24, 29 & 31-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carrell (U.S. 6,310,554) in view of Kennedy et al. (U.S. 4,812,825).

Regarding claim 1, Carrell discloses a portable weather detection (10) having alarm devices (86,100) [ figs.1-4, col.2, lines 17-34, line 66 to col.3, line 5, col.3, line 63 to col.4, line 20, line 64 to col.5, line 5 and lines 47-57 ] comprising:

- the weather detection includes a sensor (26) for receiving, monitoring & measuring a change in the barometric pressure with digital signals / A/D converter (22) [ figs.2-4, col.4, lines 1-20, col.5, lines 14-35 ];
- the sensor (26) couple to controller (44) for processing & determining the low pressure as indicating the possibility of approaching severe weather by barometric pressure data collected over time before, during and after a storm [ fig.2, col.5, lines 15-50 ];
- the alarm signals (86,100) communicate with the controller (44) & sensor (26) and will be activated when the severe weather is determined by the controller [ figs.2-4, col.5, lines 15-57 ].

The reference of Carrell does not specifically mention term as electromagnetic signal as claimed by the applicant.

However, Kennedy teaches tornado warning system (10) uses a superheterodyne receiver (16) to detect electromagnetic energy produced by a tornado, the display (22) may show continuous amplitude modulated signal associated with a tornado and discontinuous or burst electromagnetic energy associated with lightning and alarm signal (28) will be turned on [ fig.1, col.1, lines 58-68 and col.3, lines 37-68 and col.6, lines 1-7 ].

Therefore, it would have been obvious to one having ordinary skill in the art to utilize the teaching of Kennedy in the system of Carrell for receiving & detecting the electromagnetic energy produced by a tornado by radio frequency and to reject of unwanted signals.

Regarding claim 2, Carrell discloses the weather detection includes a sensor (26) for receiving, monitoring & measuring a change in the barometric pressure with digital signals / A/D converter (22) [ figs.2-4, col.4, lines 1-20, col.5, lines 14-35 ]; and

Kennedy teaches the display signal (22) may show continuous amplitude modulated signal associated with a tornado and discontinuous or burst electromagnetic energy associated with lightning and alarm signal (28) will be turned on [ fig.1, col.3, lines 37-47 and col.5, lines 1-12 ].

Art Unit: 2636

Regarding claims 3-5, Kennedy teaches tornado warning system (10) uses a superheterodyne receiver (16) to detect electromagnetic energy produced by a tornado, the display (22) may show continuous amplitude modulated signal associated with a tornado within the frequency range of Mhz to 100Mhz [ fig.1, col.1, lines 58-68 and col.2, lines 22-33 and col.3, lines 4-21 ] NOT as 60 kilohertz as claimed by the applicant because that is an obvious design choice of the skilled artisan.

Regarding claims 6-9, Carrell discloses the weather detection includes a sensor (26) for receiving, monitoring & measuring a change in the barometric pressure with digital signals / A/D converter (22) [ fig.2, col.4, lines 1-20, col.5, lines 14-35 ]; and

Kennedy teaches the superheterodyne receiver (16) to detect electromagnetic energy produced by a tornado, the display (22) may show continuous amplitude modulated signal associated with a tornado and discontinuous or burst electromagnetic energy associated with lightning and alarm signal (28) will be turned on [ fig.1, col.1, lines 58-68 and col.3, lines 37-68 and col.6, lines 1-7 ].

Regarding claims 10-12, Carrell discloses the weather detection includes a sensor (26) for receiving, monitoring & measuring a change in the barometric pressure with digital signals / A/D converter (22) [ fig.2, col.4, lines 1-20, col.5, lines 14-35 ];

- the sensor (26) couple to controller (44) for processing & determining the low pressure as indicating the possibility of approaching severe weather by barometric

Art Unit: 2636

pressure data collected over time before, during and after a storm [ fig.2, col.5, lines 15-50 ].

Regarding claim 13, Carrell discloses the portable weather detection (10) having a power supply / battery (70) [ fig.2, col.5, lines 8-11 ].

Regarding claims 14-15, Carrell discloses the portable weather detection (10) having a power supply / battery (70) with sleep mode / low power mode for saving energy [ fig.4, col.5, lines 20-26 ].

Regarding claims 16-18, Carrell discloses the sensor (26) couple to controller (44) for processing & determining the low pressure as indicating the possibility of approaching severe weather by barometric pressure data collected over time before, during and after a storm [ figs.2-4, col.5, lines 15-50 ]; and the alarm signals (86,100) communicate with the controller (44) & sensor (26) and will be activated when the severe weather is determined by the controller [ figs.2-4, col.5, lines 15-57 ].

Regarding claim 21, Carrell discloses the weather detection includes a sensor (26) for receiving, monitoring & measuring a change in the barometric pressure with digital signals / A/D converter (22) [ fig.2, col.4, lines 1-20, col.5, lines 14-35 ];

Art Unit: 2636

- the sensor (26) couple to controller (44) for processing & determining the low pressure as indicating the possibility of approaching severe weather by barometric pressure data collected over time before, during and after a storm [ figs.3-4, col.5, lines 15-50 ];

Regarding claims 23-24, Carrell discloses the portable weather detection (10) having a port to allow the device to interface with a computer [ col.3, lines 6-8 ].

Regarding claim 29, Carrell discloses the sensor (26) couple to controller (44) for processing & determining the low pressure as indicating the possibility of approaching severe weather by barometric pressure data collected over time before, during and after a storm [ figs.2-4, col.5, lines 15-50 ];

the alarm signals (86,100) communicate with the controller (44) & sensor (26) and will be activated when the severe weather is determined by the controller [ figs.2-4, col.5, lines 15-57 ].

Kennedy teaches tornado warning system (10) uses a superheterodyne receiver (16) to detect electromagnetic energy produced by a tornado, the display (22) may show continuous amplitude modulated signal associated with a tornado and discontinuous or burst electromagnetic energy associated with lightning and alarm signal (28) will be turned on [ fig.1, col.1, lines 58-68 and col.3, lines 37-68 and col.6, lines 1-7 ].

Art Unit: 2636

Regarding claim 31, Carrell discloses a weather detection (10) having alarm devices (86,100) [ figs.1-4, col.2, lines 17-34, line 66 to col.3, line 5, col.3, line 63 to col.4, line 20, line 64 to col.5, line 5 and lines 47-57 ] comprising:

- the weather detection includes a sensor (26) for receiving, monitoring & measuring a change in the barometric pressure with digital signals / A/D converter (22) [ figs.2-4, col.4, lines 1-20, col.5, lines 14-35 ];
- the sensor (26) couple to controller (44) for processing & determining the low pressure as indicating the possibility of approaching severe weather by barometric pressure data collected over time before, during and after a storm [ fig.2, col.5, lines 15-50 ];
- the alarm signals (86,100) communicate with the controller (44) & sensor (26) and will be activated when the severe weather is determined by the controller [ figs.2-4, col.5, lines 15-57 ].

The reference of Carrell does not specifically mention term as electromagnetic signal as claimed by the applicant.

However, Kennedy teaches tornado warning system (10) uses a superheterodyne receiver (16) to detect electromagnetic energy produced by a tornado, the display (22) may show continuous amplitude modulated signal associated with a tornado and discontinuous or burst electromagnetic energy associated with lightning and alarm signal (28) will be turned on [ fig.1, col.1, lines 58-68 and col.3, lines 37-68 and col.6, lines 1-7 ].



Therefore, it would have been obvious to one having ordinary skill in the art to have the teaching of Kennedy in the system of Carrell for receiving & detecting the electromagnetic energy produced by a tornado by radio frequency and to reject of unwanted signals.

Regarding claim 32, Kennedy teaches tornado warning system (10) uses a superheterodyne receiver (16) to detect electromagnetic energy produced by a tornado, the display (22) may show continuous amplitude modulated signal associated with a tornado within the frequency range of Mhz to 100Mhz [ fig.1, col.1, lines 58-68 and col.2, lines 22-33 and col.3, lines 4-21 ] NOT as 60 kilohertz as claimed by the applicant because that is an obvious design choice of the skilled artisan.

Regarding claims 33-36, Carrell discloses the weather detection includes a sensor (26) for receiving, monitoring & measuring a change in the barometric pressure with digital signals / A/D converter (22) [ fig.2, col.4, lines 1-20, col.5, lines 14-35 ];

- the sensor (26) couple to controller (44) for processing & determining the low pressure as indicating the possibility of approaching severe weather by barometric pressure data collected over time before, during and after a storm [ fig.2, col.5, lines 15-50 ] and

Kennedy teaches the superheterodyne receiver (16) to detect electromagnetic energy produced by a tornado, the display (22) may show continuous amplitude modulated signal associated with a tornado and discontinuous or burst electromagnetic

Art Unit: 2636

energy associated with lightning and alarm signal (28) will be turned on [ fig.1, col.1, lines 58-68 and col.3, lines 37-68 and col.6, lines 1-7 ].

Regarding claims 37-38, Carrell discloses the sensor (26) couple to controller (44) for processing & determining the low pressure as indicating the possibility of approaching severe weather by barometric pressure data collected over time before, during and after a storm [ figs.2-4, col.5, lines 15-50 ]; and

the alarm signals (86,100) communicate with the controller (44) & sensor (26) and will be activated when the severe weather is determined by the controller [ figs.2-4, col.5, lines 15-57 ].

Regarding claim 39-44, Carrell discloses the weather detection (10) having alarm devices (86,100) [ figs.1-4, col.2, lines 17-34, line 66 to col.3, line 5, col.3, line 63 to col.4, line 20, line 64 to col.5, line 5 and lines 47-57 ];

- the weather detection includes a sensor (26) for receiving, monitoring & measuring a change in the barometric pressure with digital signals / A/D converter (22) [ figs.2-4, col.4, lines 1-20, col.5, lines 14-35 ];
- the sensor (26) couple to controller (44) for processing & determining the low pressure as indicating the possibility of approaching severe weather by barometric pressure data collected over time before, during and after a storm [ fig.2, col.5, lines 15-50 ];

- users may recognize the type of weather condition when he or she look at the graph of severe weather pressure data and know timely for seeking shelter [ figs.3-4, col.3, lines 9-12, col.5, lines 28-50 ].

3. Claims 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carrell (U.S. 6,310,554) in view of Kennedy et al. (U.S. 4,812,825) further in view of Pabst et al. (U.S. 6,164,130).

Regarding claims 19-20, The reference of Carrell & Kennedy do not specifically mention a temperature as claimed by the applicant.

However, Pabst teaches a meteorological electromagnetic measuring system having temperature sensor [ col.4, lines 33-37 ].

Therefore, it would have been obvious to one having ordinary skill in the art to employ the teaching of Kennedy & Pabst includes a temperature sensor in the system of Carrell for tracking the local environment weather as desired.

4. Claims 22, 25-28, 30 & 46-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carrell (U.S. 6,310,554) in view of Kennedy et al. (U.S. 4,812,825) further in view of Smith (U.S. 6,351,218).

Art Unit: 2636

Regarding claim 22, The reference of Carrell & Kennedy do not specifically mention a compass for directions as claimed by the applicant.

However, Smith teaches an apparatus for activating weather warning devices (301-308) which having a display / computer screen (300) for showing directions of the storm in the region [ fig.3, col.2, lines 8-18, col.5, lines 55-66 ].

Therefore, it would have been obvious to one having ordinary skill in the art to employ the teaching of Kennedy & Smith in the system of Carrell for tracking directions of the storm or severe weather.

Regarding claims 25-27, The reference of Carrell & Kennedy do not specifically mention a digital device which can be computer, PDA, or cellular phone as claimed by the applicant.

However, Smith teaches an apparatus for activating weather warning devices as (201, 202), cellular phone (218), hand held device as Palm Pilot and (301-308) which having a display / computer screen (300) for alerting device users that the storm is approaching to the region [ figs.2B, 3, col.3, lines 38-50, col.4, lines 36-67, col.5, lines 55-66 ].

Therefore, it would have been obvious to one having ordinary skill in the art to employ the teaching of Kennedy & Smith in the system of Carrell for warning to the user by multi electronic devices in the remote location by wireless signal.

Art Unit: 2636

Regarding claim 28, Smith teaches the apparatus for activating weather warning devices (301-308) which having a display / computer screen (300) may includes the GPS system for positioning [ fig.2, col.3, lines 44-50 and col.4, lines 56-64 ].

Regarding claims 30 & 46-47, Smith teaches the apparatus for activating weather warning devices (301-308) which having a display / computer screen (300) may communicate with National Weather Service [ col.4, lines 22-35 and col.7, lines 1-8 ].

### **Conclusion**

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Parker et al. (U.S. 6,960,995).
- Cragun (U.S. 6,177,873).
- Karamanian et al. (U.S. 2003/0197616).

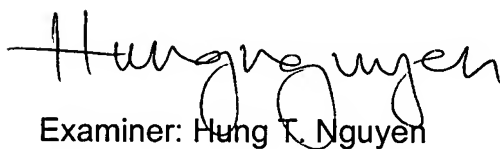
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung T. Nguyen whose telephone number is (571) 272-2982. The examiner can normally be reached on Monday to Friday from 8:00 am to 5:30 pm.

Art Unit: 2636

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hofsass, Jeffery can be reached on (571) 272-2981. The fax phone number for this Group is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4700.

**HUNG NGUYEN**  
**PRIMARY EXAMINER**

A handwritten signature in black ink, appearing to read 'Hung Nguyen', written over the printed name.

Examiner: Hung T. Nguyen

Date: Dec. 7, 2005